

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 25, 2011

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending February 25, 2011

Staff members Bamdad, Caleca, Gibson, Kimball, Moury, Pasko and Shuffler held a teleconference with LANL personnel this week to discuss the conceptual design for fire suppression system seismic upgrades at the Plutonium Facility.

Material Disposal Area (MDA)-B: This week, MDA-B management curtailed operations in an excavation enclosure when multiple glass jars were unearthed and found to contain beryllium fines. This operation will remain suspended until appropriate controls and training are implemented.

Overall, MDA-B continues to perform work under the approved 10CFR830 exemption that authorizes operations involving material at risk (MAR) up to 56 ²³⁹Pu-equivalent (PE)-Ci. To-date, the pace of excavation activities have outstripped the pace of material shipments, resulting in the accumulation of about 26 PE-Ci staged above ground in metal storage bins with secured lids. The bins are located in roughly 20 segregated waste container storage areas that are authorized and controlled in accordance with the NNSA-approved Facility Safety Plan. Laboratory personnel are attempting to ramp-up material shipments to accelerate deinventory of accumulated above ground MAR. In the meantime, LANL has committed to formally notify the NNSA site office if the total MAR inventory exceeds 28 PE-Ci and further committed to suspending active MDA-B excavation if MAR reaches 45 PE-Ci (site rep weeklies 10/22/10, 10/15/10, 9/10/10).

Readiness: This week, the NNSA site office formally requested that LANL review recent adverse indicators in the readiness review program and identify corrective actions to improve the execution of the readiness review and startup process. The request noted several examples of recent issues for startup activities at Area G and the difficulties in resuming operations at the Weapons Engineering Tritium Facility to support an important programmatic deliverable.

Chemistry and Metallurgy Research (CMR) Building: To improve safety and operational reliability at CMR, LANL plans to replace the four exhaust ventilation fans in Wings 5 and 7. Currently, one of the fans in Wing 5 has been replaced with system testing on-going. This fan is expected to be operable in March. Initial activities to support replacement of the first fan in Wing 7 have also started. LANL had also planned to replace the Wing 5 and 7 HEPA filters this year; however, quality assurance issues with the vendor may delay completion of this activity until 2012.

Transuranic Waste Operations – Criticality Safety: This week, LANL forwarded to the NNSA site office the final report for the assessment of the criticality safety management program at Area G (preliminary results noted in the 2/11/11 site rep report). Overall, LANL concludes that the activities at Area G comply with the safety margins required by ANSI/ANS 8.1. In addition, program improvements and maturity consistent with the nuclear criticality program safety improvement plan continue to be pursued at Area G. The assessment team also recommended that LANL management reconsider a 2007 decision to use new fissile gram equivalent values generated by Central Characterization Project personnel, once available and validated, to replace fissile gram equivalent data provided by waste generators. This recommendation is being evaluated.